REMARKS

Introduction

Claims 1-3, 6, 7, 9-18, and 20-24 are pending in the present application.

In the above amendments, claims 1, 6, 10, 18, and 22 have been amended; and claims 4, 5, 8, and 19 have been canceled without prejudice or disclaimer.

Claims 1, 6, 18, and 22 are the independent claims of the application.

In the Final Office Action mailed on 10/21/2006, the Examiner objected to the drawings. Further, claims 1-14 and 17-25 were rejected under 35 U.S.C. § 102 as being anticipated by the admitted prior art shown in Figure 5 (the "admitted prior art"); and claims 15 and 16 were rejected under 35 U.S.C. § 103(a) as being unpatentable over the admitted prior art and further in view of Xu *et al.*, U.S. Patent Application Publication No. 2001/0052104 ("Xu").

Applicants respectfully respond to the Final Office Action.

Drawings

Figures 1, 2, 3, and 4 have been labeled "PRIOR ART" in accordance with the Examiner's requirement. Applicants note, however, that various aspects of the present invention may be practiced in conjunction with what is shown in these Figures. In particular, the decoder 20 of Figure 1 may be configured to perform in accordance with methods of the present invention, in addition to the prior art methods.

The following changes have been made to Figure 6:

1. The label of connector 651 has been changed from $M(x_i, C_i)$ to $M(X_i, C_i)$;

2. The label of connector 654 has been changed from $M(D_k, z_k)$ to $M(D_k, Z_k)$; and

3. The label of connector 655 has been changed from $M(z_k, D_k)$ to $M(Z_k, D_k)$.

Applicants submit that the amendment to Figure 6 do not make any substantive changes or introduce any new material, and have been made in accordance with the Examiner's objections and suggestions. Therefore, approval and entry of the above amendments to the drawing are respectfully requested.

Specification:

The Examiner objected to the drawings, noting that a number of reference characters that appear in Figure 6 are not mentioned in the specification. In response, Applicants have amended paragraph [00030], including a recitation of the branches represented by the reference characters that had been previously not mentioned in the specification. Applicants note that the symbol Z_k node 603 is mentioned in paragraph [00030] as originally filed and as amended. The amendments to the specification are made by presenting marked up replacement paragraph [00030,] identifying changes made relative to the immediate prior version.

The changes made are in conformance with the Examiner's objections. The changes are consistent with the original disclosure.

Applicants believe that these changes do not add new matter to the application and are fully supported by the original specification and drawings.

Claim Rejections

In the Final Office Action, the Examiner rejected claims 1-14 and 17-25 under 35 U.S.C. § 102(a) as being anticipated by the admitted prior art shown in Fig. 5 (the "admitted prior art").

Independent claim 1 has now been amended to recite that the "triggering schedule includes triggering all said computational nodes C and D at different instances of time essentially concurrently for each decoding iteration." Support for this limitation is found in the specification, for example, in numbered paragraph [00048], last four sentences. The admitted prior art does not disclose this limitation. Applicants respectfully submit that the admitted prior art fails to anticipate independent claim 1 at least for this reason.

Claim 6 has been amended and is now in independent form. As amended, the scope of claim 6 is identical or substantially identical to the scope of former claim 8, which has now been canceled. In rejecting claim 8, the Examiner wrote that the admitted prior art of Figure 5 shows "input 541 of block 501 wait until block 502 produces its output 560 and that output is deinterleaved by block 531 and this process is repeated until a determined number of iterations that define a number of subsets that happen a different time instances, each iteration wait for the previous iteration." It appears that this reasoning equates "iteration" with "subset." The concept

of a decoding iteration, however, differs from the concept of a subset of computational nodes. An iteration corresponds to a repetition of the triggering schedule, which updates the computational nodes. See, for example, the specification, numbered paragraph [0004], particularly second and third sentences from the end. In contrast, "subsets" refer to computational nodes at different time instances of a symbol sequence. See the "partitioning clause of claim 6; see also the specification, numbered paragraph [00050], particularly the first sentence.

In accordance with the method of claim 6, computational nodes C_0, C_1, C_2, ..., C_N are partitioned into subsets, and nodes in the different subsets are triggered concurrently for each iteration of decoding. The admitted prior art does not teach such steps. Applicants respectfully submit that the admitted prior art fails to anticipate amended claim 6 (and the now-canceled claim 8) at least for this reason.

Independent claims 18 and 22, as amended, recite *concurrent triggering of each node of a first plurality of said computational nodes C, and concurrent triggering of each node of a second plurality of computational nodes D*, and should be patentable over the admitted prior art at least for the same reason as claim 6.

The above discussion addresses rejections of all independent claims of the application. Dependent claims should be patentable at least for the same reasons as their base claims and intervening claims, if any.

REQUEST FOR ALLOWANCE

In view of the foregoing, Applicants submit that all pending claims in the application are patentable. Accordingly, reconsideration and allowance of this application are earnestly solicited. Should any issues remain unresolved, the Examiner is encouraged to telephone the undersigned at the number provided below.

Respectfully submitted,

Dated: **January 23, 2006**

By: _____

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IN THE DRAWINGS

Please amend the drawings as follows:

The attached sheets of drawings include changes to Figures 1, 2, 3, 4, and 6. These sheets replace the original sheets including Figures 1, 2, 3, 4, and 6.

Attachment: Replacement Sheets